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USER MANUAL 2004

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Deutsch

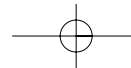
English

Français

Nederlands

Italiano

Español



# English

## Contents

1. Introduction	11
1.1. Magura Odin rear shocks and its application	11
1.2. Assembly	11
1.3. Set-up	12
1.4. Before every ride	13
1.5. During the ride	13
1.6. After crash or accident	13
1.7. Further references	13
2. Maintenance and warranty	14
2.1. Maintenance	14
2.2. Warranty	14
3. Glossary	15
4. Adjustment of your Odin rear shock	16

This user manual gives you detailed instructions on the set up of your rear shock. You can find more information on the web at [www.magura.com](http://www.magura.com). If you still have questions, please send an e-mail to [service@magura.de](mailto:service@magura.de).

This user manual is part of the product. Do not hand over the product to third parties without this manual.

Pictures and descriptions may vary to the product being explained.

Technical details are subject to change with out prior notice.

## Explanations



### Danger

This symbol means possible danger to your health and even life if you do not follow the instructions given, or if the necessary safety instructions are not followed.



### Attention

This symbol warns you of inappropriate handling that could lead to serious damage to the material and/or the environment.



### Note icon

This symbol gives you additional information about the general handling of the product or indicates paragraphs in this manual, which have to be read carefully.

Pictures and descriptions may vary to the product being explained.



# 1. Introduction



Dear Customer, congratulations! You have just become a member of the MAGURA mountain bike community. We believe that our products result in a higher ride quality and hope you will enjoy our products for many years to come. Please take the time to read this manual carefully, so you can become familiar with your new fork and find out how to get the best set-up for your own expectations.

-RIDE HARD-

The MAGURA Suspensionmeister

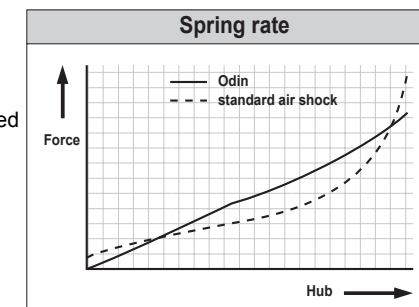
## 1.1. Magura Odin rear shocks and its application

Odin air rear shocks are designed for X-Country, Marathon and tour use.

All Odin rear shocks feature a unique linear spring rate, that is achieved through an automatic adjustment of the air chamber. This leads to a linear spring rate, appreciated from coil spring rear shocks. Additionally there is more usable travel available.

The damping systems Albert and Albert Plus avoid the annoying bobbing effect from pedalling (no bobbing). At the Odin Plus rear shock you can even adjust high and low-speed compression damping separately (system Albert Plus).

All MAGURA rear shocks are available in different mounting lengths.

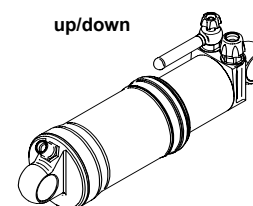


## 1.2. Assembly

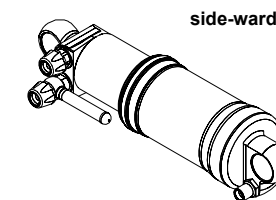


**If you are not sure, if you can assemble the rear shock by yourself into your bike, let it been made by your professional dealer. He's got the knowledge and specific tools for a proper assembly.**

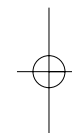
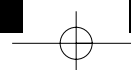
If you assemble the rear shock by yourself, make sure it is compatible with your frame. Important are shock length from eye to eye (190mm/7.5", 165mm/6.5", 151mm/6"), width and diameter of mounting hardware. The rear shock must not collide with the frame, rockers or rear end. To adapt the rear shock to different frame geometries, there are different version available concerning position of the valve or knob side (up-/down-wards or side-wards).



up/down



side-wards



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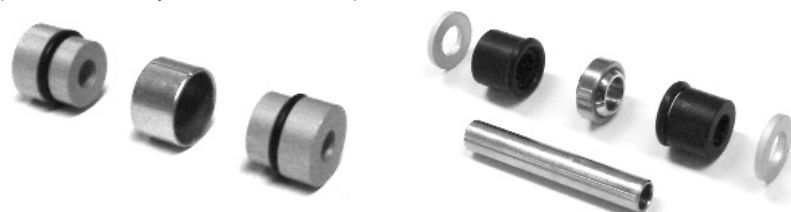


If possible, the rear shock should be assembled with the knob side facing down-wards, allowing for better dirt removal from the steel piston. It's also advisable to position the knob side-wards the frame for easier knob adjustment when riding.

It is possible to rotate the steel cylinder against the aluminium body. First remove air from the air chamber, hold one eyelet tight in a vice and rotate the other one clockwise. Mount rear shock back to frame and pump up.

MAGURA rear shocks are sold in aftermarket with ball-and-socket mounts. OEM rear shocks have generally normal bushings.

To achieve different mounting widths and diameters please use the delivered hardware with optional spacers. Assembly is as shown in the picture.



normal bushings

ball-and-socket with sleeves, spacer and reducer



**An improper assembly of the rear shock in the frame can cause failure! Check (you or your dealer) mandatory for correct assembly.**

### 1.3. Set-up

After a correct assembly you can start fine-tuning the settings of your rear shock. You can use the following guidelines to realize a perfect set up. See the glossary in chapter 3 for explanations of the used terminology and chapter 4 for adjustments.

- Your rear shock should sag about 15% of its total travel when you sit relaxed on your bike. When sag is less, remove preload, i.e. air, when sag is more, add preload, i.e. air. When changing air pressure always move the shock more than half of its travel to have the negative chamber auto inflated with the main chamber.
- When the rear shock is good on occasional bumps but gets hard after several sequential bumps, you have probably set too much rebound damping so the rear shock can't return fast enough and there isn't enough travel left to absorb the bumps. If the rear shock is bouncy on single impacts, then you should add more rebound damping.
- If the rear shock dives too much, you can add compression damping on some models. If you don't have compression adjustability on your rear shock, you should add some preload. On the other hand, if you don't use all the travel, remove some compression damping or use less air.

More detailed instructions for each model can be found in chapter 4.

### 1.4. Before every ride



- Always wear a helmet.
- Make sure the rear shock doesn't have any mechanical external damages.
- Make sure the mounting bolts are tightened with the right torque (see manual of the frame).
- Make sure the rear shock is assembled without any play.
- Check for correct air pressure.
- Look for possible leakages.

### 1.5. During the ride



- If you hear strange noises after hard impacts from your rear shock, that possibly could be a damage, stop riding (danger for health and life). Bring/send the rear shock to an authorised dealer or to a MAGURA service.

### 1.6. After crash or accident



- Check the rear shock after a crash for damages. The use of damaged or not correct working rear shocks can cause danger for health and life. Have your rear shock checked by an authorized dealer.

### 1.7. Further references



- Please note that hard and out of control landings can cause severe damage to the rear shock with consequence danger for health and life.
- A non correct assembly of the rear shock in the frame can cause failure! Please check (you or your dealer) for correct assembly. Check for correct tightening torques (see frame manual).



- If you have doubts about the status of your rear shock please contact your dealer or ask a MAGURA Service.

**The rear shocks of the Odin range are intended for Cross Country (XC) use. Manufacturer and dealer are not liable for every other surpassing use or not respecting the security guidelines of this manual.**

- Manufacturer and dealer are also not liable for overloading the bike and for non correct removal of damages. Maximum system weight including bike, biker and luggage is 130kg/285lbs.

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## 2. Maintenance and warranty

### 2.1. Maintenance



- We recommend cleaning your rear shock on a regular basis. Use water, mild soap and a brush. Do not use a power washer as water may be forced through the seals, destroying them, the internals and piston rods.
- All MAGURA 2004 rear shocks have oil damping and thus require little maintenance. They only need once a year a service. Racers should consider that they give a harder use to their components and need service more often.
- **We state, that MAGURA rear shocks must not be disassembled. Disassembly can only be done by MAGURA Service Centers or MAGURA itself. The internal structure requires special tools and special filling machines. Already small amounts of air can cause malfunctioning of the rear shock.**

### 2.2. Warranty



- Parts, components and assemblies subject to normal wear and tear are not covered under this warranty.
- The warranty can expire when use according to the terms is no longer applicable. To this appropriate use also belongs the conditions for operating, maintaining and servicing as prescribed in the manual.
- Like every other product, the rear shock also contains parts that wear out as time passes by. The life span of these parts depend on the type and frequency of use, as well on care and maintenance. Please note that the usual wear of parts is normal and therefore no reason for objection. This especially applies to: bushings, seals and the surface of the piston.
- Warranty duration and laws may vary from state to state and/or country to country.
- We point out that a warranty case can only be handled with an enclosed proof of purchase.
- The warranty can expire in case of:
  - Abnormal strain, neglect, abuse and/or misuse
  - Accident or collision damage
  - Application of not-original Magura parts and lubrication products
  - Changing the surface (for instance painting)
  - Incorrect maintenance
  - Transport damage or loss
  - Exceeding the system weight of 130kg (286lbs)

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## 3. Glossary



### Preload



Preload means the initial force on the rear shock springs, either coil or air. Most riders would like to set the preload so that the rear shock sags about 15% of its maximum travel when they sit gently on their bike. For air sprung rear shocks you must at least inflate as much air as necessary to prevent bottoming out.

### Speed sensitive damping



The unique Albert and Albert Plus damping systems can differentiate between high- and low-speed damping, both for rebound and compression. By this pedal induced bobbing is eliminated. With Odin Plus you can even adjust high- and low-speed compression damping separately meeting your exact needs without loss of sensitivity.

### Rebound damping



The rebound damping controls the speed of the rebound stroke of your rear shock. Too slow rebound makes you loose contact with the ground, which result in loss of traction and control. On the other side a too fast rebound makes the rear shock bounce over the ground and you will loose control as well.

### Compression damping



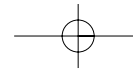
Controls the compression stroke of the rear shock. More compression gives you a harder feeling, because more force is needed to compress the rear shock with a certain speed. As well reducing the compression damping the rear shock becomes plusher.

### Lockout



Gives you the possibility to stop the complete movement of your rear shock. A closed lockout eliminates movement of the shock on uphill or in a sprint. Check the position of the lockout before every ride. The lockout must not be closed on downhill or uneven ground!

(Descriptions and pictures may vary from the explained product).

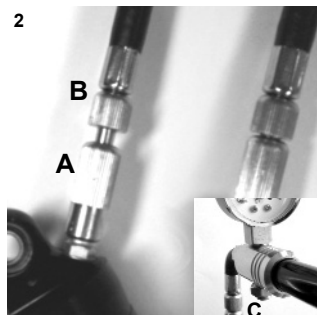


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## 4. Adjustment of your Odin



**2** Screw the MAGURA pump onto the Schrader valve, starting with part A until it is sealed, then using part B to open the Valve. Now pump to the desired pressure. Adjust air pressure for correct sag (15%). Air pressure can vary in a big range depending on linkage geometry of your bike, which is why no recommendation can be made.

Release air through C. To remove the pump, first unscrew part B. Then remove part A. **Max. air pressure: 20 bar.**

**1** The rear shock is delivered with a default pressure of 14 bar. Remove the air cap on the valve for air pressure adjustment.



**Compress the rear shock about half of its travel to get the balance right between main air chamber and the auto-inflated negative chamber.**

**Plus**



Rebound knobs are red, compression knobs (also high speed) are blue, low-speed-compression knobs are golden. Turning the knob clockwise increases the damping (slower/harder), counterclockwise decreases the damping (faster/softer).



**Pro**



When the air pressure is set correctly, you can adjust the compression damping. Compression damping should be adjusted in the way that the complete travel can be reached, but without bottoming out. Check the used travel with the O-ring on the piston on your reference trails. Adjustments depend on your personal preferences.

**CP**



Model **Plus** features the golden low-speed-compression knob. Low speed movements (e.g. from pedalling) of the rear shock are reduced to a minimum. Turning clockwise reduces movements even more, turning anti-clockwise allows for more movement.



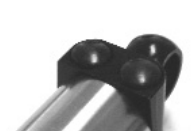
**C**



On model **Pro** movement of the rear shock can be blocked with the lockout lever. Turning anti clockwise blocks the rear shock, clockwise opens again.



**S**



**Attention: The rear shock can be damaged with a blocked lockout. Warranty can be void with wrongly used lockout.**

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